

# Arizona Department Environmental Quality



# **Notice of Proprietary Product Listing** Pursuant to Arizona Administrative Code R18-9-A309(E) LTF #68462

1. Proprietary Product Name, Model, and Description

Product Name: EZflow Expanded Polystyrene (EPS) Aggregate System

12" Diameter & 18" Diameter Bundles Sizes:

Description: EZflow is a wastewater dispersal product that serves the same purpose as a

chamber or trench disposal pipe and fill. It provides the means to overcome site limitations through superior hydraulic performance as compared to the hydraulic performance of conventional mined aggregate and pipe in a trench.

This listing is applicable for design flows up to 24,000 gpd.

2. Manufacturer Information

Name: Infiltrator Water Technologies

Address: PO Box 768, 4 Business Park Road City/State/Zip: Old Saybrook, Connecticut 06475

> Phone: 800-221-4436 Fax: 800-577-7001

Website: http://www.infiltratorwater.com

3. Minimum Wastewater Treatment – the treated wastewater released to the native soil through the expanded polystyrene aggregate meets the following criteria:

| Parameter   | Averaging Time             | Parameter Value for<br>Averaging Time |
|---|----------------------------|---------------------------------------|
| 5-Day Biochemical Oxygen Demand (BOD <sub>5</sub> ), mg/l | 30-day arithmetic mean     | 150                                   |
| Total Suspended Solids (TSS), mg/l                        | 30-day arithmetic mean     | 75                                    |
| Total nitrogen as nitrogen(TN), mg/l                      | five-month arithmetic mean | 53                                    |
| Total coliform, colony forming units/100ml                | 95th percentile            | 100,000,000                           |

# 4. Product Applicability and Limitations for Use for a Recognized General Permit Technology

#### Applicability:

- a. The EZflow product is a disposal pipe and aggregate substitute placed within a trench, and serving the same purpose as a chamber or trench disposal pipe and aggregate fill described under A.A.C. R18-9-E302.
- b. The requirements, including processing and application and inspection fees, for the Notice of Intent to Discharge pursuant to A.A.C. R18-9-A309(B) and (C), shall be for a treatment and disposal works pursuant to A.A.C. R18-9-E302 Type 4.02 General Permit for the EZflow products shown in item 4 of this product listing notice.
- c. The EZflow product shall be designed and installed in accordance with the manufacturer's recommendations.
- d. Operation and maintenance requirements for the EZflow product shall be identical to the requirements for a chamber or trench disposal pipe and aggregate fill described under A.A.C. R18-9-E302.

#### Limitations:

- a. The product is subject to A.A.C. R18-9-A312(F)(2) and (4).
- b. The product shall only disperse septic tank effluent or better quality.

c. The product shall conform to the following:

| EZflow<br>Configuration | Bundle<br>Diameter<br>(in) | Number<br>of<br>Bundles | Number of<br>4-Inch<br>Diameter<br>Pipes | Trench<br>Width<br>(in) | Allowable Effective<br>Absorption Area<br>(sf/lf) |
|-------------------------|----------------------------|-------------------------|--|-------------------------|---|
| 1803T                   | 18                         | 3                       | -1                                       | 36                      | 11 Annue 11                                       |
| 1804V                   | 18                         | 4                       | 1  | 36                      | 11  |
| 1805T                   | 18                         | 5                       | 1  | 36                      | 11  |
| 1802H                   | 18                         | 2                       | 1  | 36                      | 7.1   |
| 1209V                   | 12                         | 9                       | ar and a said                            | 36                      | бабыкага и П грация                               |
| 1205T                   | 12                         | 5                       | 1  | 24                      | 9.5   |
| 1206V                   | 12                         | 6                       | 1  | 24                      | 10  |
| 1207T                   | 12                         | 7                       | 105(I)                                   | 24                      | politica esta Hill coste                          |
| 1208V                   | 12                         | 8                       |  | 24                      | 11  |
| 1801V                   | 18                         | 1                       | 1  | 18                      | Miles Imlant 5 of Inc. 1                          |
| 1802V                   | 18                         | 2                       | 1  | 18                      | 9.3   |
| 1803V                   | 18                         | 3                       | enand                                    | 18                      | 11  |
| 1202V                   | 12                         | 2                       | STATE OF                                 | 12                      | 5.7   |
| 1203V                   | 12                         | 3                       | 1  | 12                      | 8.6   |
| 1204V                   | 12                         | 4                       | ı  | 12                      | 11  |

- d. This listing EXCLUDES appurtenances such as filter fabric, an alarm, control panel, control, switch, timer, wiring, other electrical devices, and installation components; which are subject to both the manufacturer specifications and any more restrictive requirement in 18 A.A.C. 9, Article 3.
- e. This listing is for dispersal of effluent that comes from treatment of wastewater that meets the definition of typical sewage as defined in A.A.C. R18-9-101(42).

### 5. Alternative Criteria and Exceptions for Use under the Recognized General Permit Technology

| Alternative: | None |   |
|--------------|------|---|
| Exception:   | a.   | When the effluent comes from the treatment of wastewater that does not meet the definition of typical sewage as defined in R18-9-101(42), a Manufacturer's Design Review Report shall be submitted for review and approval along with the Notice of Intent to Discharge. This Design Review Report shall specify component capacities, and supplemental installation & operational practices. |

## 6. Documents Used as the Basis for this Proprietary Product Listing Notice

| Arizona PPL Application, Date 3/16/17:         | Tab #1  |
|--|---------|
| Product Information:                           | Tab #2  |
| Product Warrantee:                             | Tab #3  |
| Technical Drawings dated 6/01/09 thru 9/18/14: | Tab #4  |
| Pretreatment Requirements:                     | Tab #5  |
| Engineering Details & Calculations:            | Tab #6  |
| Specifications of Materials:                   | Tab #7  |
| Operation & Maintenance Information:           | Tab #8  |
| Installer Instructions:                        | Tab #9  |
| Third Party Independent Testing:               | Tab #10 |
| Design Manual:                                 | Tab #11 |

### 7. Terms and Conditions for this Proprietary Product Listing Notice

- a. This Notice of Proprietary Product Listing shall remain in effect until any of the following occurs:
  - 1) Applicable provisions of the Arizona Administrative Code, Title 18, Chapter 9, Article 3 are revised;
  - 2) Documents used for the basis of this listing are altered or modified;
  - 3) Manufacturer claims which are relied upon for this listing are later determined to contain an error or omission;
  - 4) The manufacturer requests termination of this listing;
  - 5) A listing error or omission is identified; or
  - 6) The manufacturer and ADEQ mutually agree to reissue this notification to incorporate a correction or update for any reason.
- b. This Notice of Proprietary Product Listing does not apply when the:
  - 1) Listed proprietary treatment product is modified or operated in a manner that conflicts with Arizona law or the documents used for the basis of this listing action in Section 6.
  - 2) Listed proprietary treatment products is used in a manner that cannot achieve the performance stated in Section 3 above.
- c. This Notice of Proprietary Product Listing applies solely to the product specified in Section 1 above.
- d. The manufacturer is responsible for notifying the ADEQ of changes to contact information at the following address:

Ground Water Monitoring & Engineering Unit

Engineering Review Desk, 5th Floor

1110 West Washington Street

Phoenix, AZ 85007.

e. The listing by ADEQ of any proprietary product or service is not an endorsement by ADEQ or the State of Arizona. ADEQ does not endorse, represent, guarantee, warranty or defend the use of any product which is authorized for use pursuant to A.A.C. R18-9-A309(E). Product providers are a direct source unrelated to ADEQ or the State of Arizona. Use of any listed product is at the user's risk and the State assumes no liability.

| Signature: | David Dunaway                | Date Signed:   | 12/8/2017 |
|------------|------------------------------|----------------|-----------|
| Title:     | Groundwater Protection Value | Stream Manager |           |

ADEQ LTF #68462

Reviewer: Raymond Morgan